## (19) World Intellectual Property Organization International Bureau



## 

(43) International Publication Date 29 July 2004 (29.07.2004)

PCT

## (10) International Publication Number WO 2004/062555 A2

(51) International Patent Classification7:

A61K

(21) International Application Number:

PCT/EP2004/000134

(22) International Filing Date: 12 January 2004 (12.01.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: EP03 000 728.0

13 January 2003 (13.01.2003) E

(71) Applicant and

(72) Inventor: RAPPOLD-HOERBRAND, Gudrun [DE/DE]; Hausackerweg 14, 69118 Heidelberg (DE).

(72) Inventor; and

(75) Inventor/Applicant (for US only): HAECKER, Beate [DE/DE]; Bergstrasse 34b, 69221 Dossenheim (DE).

(74) Agent: REINHOLD, Koester; Werderplatz 9, 69120 Heidelberg (DE).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

## Published:

 without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: USE OF NATRIURETIC PEPTIDES FOR THE TREATMENT OF STATURE DISORDERS RELATED TO THE SHOX GENE

(57) Abstract: The invention relates to the use of natriuretic peptides (ANP or BNP) for the preparation of pharmaceutical compositions for the treatment of short stature in a subject being suspected of having a genetic defect in the human SHOX gene. Further, the invention relates to use of natriuretic peptides in combination with a growth protein and/or a SHOX protein for the preparation of pharmaceutical compositions for the treatment of patients having a SHOX gene disorder. The invention also relates to the use of natriuretic peptides (ANP and BNP) in combination with a SHOX protein for the preparation of pharmaceutical compositions for the treatment of patients with cardiovascular diseases. The invention also comprises an article of manufacture comprising packaging material and a pharmaceutical composition comprising natriuretic peptides.

2004/062555